

What is claimed is:

1. A pixel element of a liquid crystal display device comprising:

a substrate;

a first layer formed above the substrate;

5 an intermediate layer covering at least part of the first layer, the intermediate layer formed by treating the surface of the first layer with plasma containing hydrogen; and

a second layer formed above the intermediate layer.

2. A pixel element of a liquid crystal display of claim 1, wherein the first layer comprises at least one of Bezocyclobutene (BCB), Fluorinated polyimide, Teflon, Cytop and Acrylic Resin.

3. A pixel element of a liquid crystal display of claim 1, wherein the second layer comprises at least one of indium tin oxide (ITO), silicon nitride ( $\text{SiN}_x$ ) and silicon oxide ( $\text{SiO}_x$ ).

4. A pixel element of a liquid crystal display of claim 1, further comprising an additional intermediate layer by treating the first layer with plasma containing at least one of oxygen and argon between the first layer and the intermediate layer.

5        5.    A pixel element of a liquid crystal display of claim 1,  
further comprising an additional intermediate layer by treating  
the intermediate layer with plasma containing at least one of  
oxygen and argon between the intermediate layer and the second  
layer.

6.    A pixel element of a liquid crystal display of claim 1,  
wherein the first layer includes an organic material and the  
second layer includes an inorganic material.

7.    A liquid crystal display device comprising:  
a substrate;  
a switching element formed above the substrate, the  
switching element having at least one electrode;  
5        an organic layer covering at least part of the substrate  
having the switching element;  
an intermediate layer formed by treating at least part of  
the surface of the organic layer with plasma containing hydrogen;  
a contact hole exposing the at least one electrode of the  
10       switching element by removing at least a portion of the organic  
layer and the intermediate layer covering the electrode; and  
an inorganic layer connecting to the at least one electrode  
through the contact hole on the intermediate layer.

8. A liquid crystal display device of claim 7, wherein the organic layer comprises at least one of Bezocyclobutene (BCB), Fluorinated polyimide, Teflon, Cytop and Acrylic Resin.

9. A liquid crystal display device of claim 7, wherein the inorganic layer is a conductive layer.

10. A liquid crystal display device of claim 9, wherein the conductive layer comprises Indium Tin Oxide.

11. A liquid crystal display device of claim 7, further comprising an additional intermediate layer by treating the organic layer with plasma containing at least one of oxygen and argon between the organic layer and the intermediate layer.

12. A liquid crystal display device of claim 7, further comprising an additional intermediate layer by treating the intermediate layer with plasma containing at least one of oxygen and argon between the intermediate layer and the inorganic layer.

13. A method for manufacturing a pixel element of a liquid crystal display device, comprising the steps of:

providing a substrate;

forming a first layer over the substrate;

5 treating at least part of the first layer with plasma containing hydrogen to form an intermediate layer; and

forming a second layer over the intermediate layer.

14. A method of claim 13, wherein the first layer comprises at least one of Bezocyclobutene (BCB), Fluorinated polyimide, Teflon, Cytop and Acrylic Resin.

15. A method of claim 13, wherein the second layer comprises at least one of indium tin oxide (ITO), silicon nitride ( $\text{SiN}_x$ ) and silicon oxide ( $\text{SiO}_x$ ).

16. A method of claim 13, further comprising a step of forming an additional intermediate layer by treating the first layer with plasma containing at least one of oxygen and argon between the first layer and the intermediate layer.

17. A method of claim 13, further comprising a step of forming an additional intermediate layer by treating the intermediate layer with plasma containing at least one of oxygen and argon between the intermediate layer and the second layer.

18. A method of claim 13, wherein the first layer includes an organic material and the second layer includes an inorganic material.

19. A method of claim 13, further comprising a step of treating the surface of the organic layer with plasma containing at least one of oxygen and argon before treating with the plasma containing hydrogen.

20. A method of claim 13, further comprising a step of treating the surface of the organic layer with plasma containing at least one of oxygen and argon after treating with the plasma containing hydrogen.

21. A method of manufacturing a liquid crystal display device, comprising the steps of:

providing a substrate;

fabricating a switching element formed on the substrate, the switching element having at least one electrode;

forming an organic layer covering at least part of the substrate having the switching element;

treating at least a portion of the organic layer with plasma containing hydrogen;

exposing the at least one electrode of the switching element by removing at least a portion of the organic layer and the intermediate layer covering the electrode; and

forming an inorganic layer connected to the at least one

electrode on the intermediate layer.

22. A method of claim 21, wherein the organic layer comprises at least one of Bezocyclobutene (BCB), Fluorinated polyimide, Teflon, Cytop and Acrylic Resin.

23. A method of claim 21, wherein the inorganic layer is a conductive layer.

24. A method of claim 23, wherein the conductive layer comprises Indium Tin Oxide.

25. A method of claim 23, further comprising a step of treating the surface of the organic layer with plasma containing at least one of oxygen and argon before treating with the plasma containing hydrogen.

26. A method of claim 23, further comprising a step of treating the surface of the organic layer with plasma containing at least one of oxygen and argon after treating with the plasma containing hydrogen.

27. A method of claim 23, wherein the treating the organic layer with the plasma containing hydrogen before the contact hole is formed.